

REMARKS/ARGUMENTS

Previously presented Claims 1, 4, 5, 7, 8, 11-15, and 22-24 are pending in this Application. No claim has been amended. Applicant respectfully asks the Examiner to reconsider the final rejections in view of the following remarks and supporting citations to the record.

Applicant appreciates the Examiner's withdrawal of the rejection of previously presented Claims 14-15 and 24 under 35 U.S.C. § 112, second paragraph. Office Action, dated March 31, 2011 (OA), page 2.

Rejections of Claims 1, 4, 7, 8, and 11-15 under 35 U.S.C. § 112, 1<sup>st</sup> ¶ (written description)

Previously presented Claims 1, 4, 7, 8, and 11-15 stand finally rejected under 35 U.S.C. § 112, first paragraph, for non-compliance with the written description requirement. For the reasons stated hereafter, the rejections should be withdrawn.

To satisfy the written description requirement of 35 U.S.C. § 112, 1<sup>st</sup> paragraph, the supporting specification must convey with reasonable clarity to persons skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991). In other words, the specification must convey with reasonable clarity that the applicant invented the subject matter claimed. Our reviewing courts have consistently instructed that compliance with the written description requirement of 35 U.S.C. § 112, 1<sup>st</sup> ¶, does not require the specification to provide a description of the subject matter ultimately claimed “*in haec verba*”, “*in ipsis verbis*,” or in the same language as the claims. *In re Lukach*, 442 F.2d 967, 969 (CCPA 1071). Whether or not a specification satisfies the written description requirement is a question of fact. *Ralston Purina Co. v. Far-Mar-Co., Inc.*, 772 F.2d 1570, 1574-75 (Fed. Cir. 1985). How close the original description of the invention in the specification must be to the claim language in order to satisfy the written description

requirement of 35 U.S.C. § 112, 1<sup>st</sup> ¶, is determined on a case-by-case basis. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d at 1565. It is not necessary to describe the claim limitations exactly as claimed as long as persons having ordinary skill in the art would have recognized from the applicant's disclosure that the invention described in the specification includes those limitations. *In re Smythe*, 480 F.2d 1376, 1382-84 (CCPA 1973).

The Examiner points to the Specification at page 26, first full paragraph, at pages 29-30, bridging paragraph, and at page 30, second full paragraph, and finds:

- (1) "[P]ermalloy is designated as a magnetic metal powder, which is distinguished from a soft magnetic powder in terms of the inherent electrical conductivity" (OA, p. 3, 1<sup>st</sup> full ¶).
- (2) "The second full paragraph on page 30 of the specification as originally filed supports the currently claimed ranges for the mass% of the magnetic powder and the electrically conductive additive only when the magnetic powder is a soft magnetic ferrite powder and not a magnetic powder, as in the case of permalloy" (OA, p. 3, 2<sup>nd</sup> full ¶).

The Examiner's findings are clearly erroneous. In the sentence bridging pages 29-30 of the Specification, Applicant expressly states (emphasis added):

On the contrary, in a case of using the magnetic metal powder for the magnetic powder, since it has electrical conductivity of itself, it is preferably added in an amount as less as possible (for example 30% or less) within the range described above (20 to 40%).

From the above quoted sentence, persons having ordinary skill in the art would have understood that magnetic metal powder having electrical conductivity itself is preferably added to the coating film in an amount from 20 to 30% since it has electrical conductivity itself. However, in the second paragraph on page 30 of the Specification, Applicant thereafter states:

Considering the foregoing collectively, in the case where both the magnetic powder and the electrically conductive additive are added in the magnetic coating film and, at first, when the soft magnetic ferrite powder is used as the magnetic powder, it is preferred that the content of the ferrite powder is about 20 to 40% and the content of the electrically conductive additive is from 20 to 40% (60% or less in total) and, on the other hand, when the magnetic metal powder is used as the magnetic powder, it is

preferred that the content is about 30 to 50% and the content of the electrically conductive additive is from 10 to 30% (60% or less in total).

From the later quoted paragraph, persons having ordinary skill in the art would have understood that the magnetic metal powder is preferably added to the coating film in an amount from 30 to 50%.

However, the Examiner finds that Applicant's Specification teaches that the magnetic metal powder should only be added to the coating film in the preferred amount from 30 to 50%, even though Applicant's Specification expressly states that the magnetic metal powder may be added to the coating film in an amount from 20 to 30% (Spec., pp. 29-30, bridging sentence). The Examiner's finding is clearly erroneous because the teaching in a disclosure should never be limited to the preferred embodiments and specific working examples. *In re Fracalossi*, 681 F.2d 792, 794 n.1 (CCPA 1982); *In re Mills*, 470 F.2d 649, 651 (CCPA 1972). The supporting specification need only convey with reasonable clarity to persons skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d at 1563-64, i.e., that the applicant invented the subject matter claimed.

To ascertain whether or not Applicant's present Specification as a whole would have conveyed with reasonable clarity to persons skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed metal sheet coated with a magnetic coating film comprising as little as 20 mass% of a magnetic powder which is a permalloy and 20-40 mass% of an electrically conductive material, wherein the total content of both is 60% or less, in accordance with previously presented Claims 1, 4, 7-8, and 11-15, persons skilled in the art reasonably would consider the examples in Table 2 on page 94 of Applicant's Specification. Examples 15-24 show magnetic film comprising 20-40 mass% of a permalloy as the magnetic powder. Of those examples, inventive Example 20 shows an electrically conductive, magnetic coating film containing 20 mass% of permalloy as the

magnetic powder and 20 mass% of an electrically conductive additive. As stated in the first full paragraph of page 95 of the Specification:

[E]ach of the specimens (Nos. 1 to 10, 15 to 24, and 27) satisfying the range of the invention for the factors regarding the magnetic coating film (content of magnetic powder and thickness of magnetic coating film) provide good characteristics in view of the microwave absorbability and the workability.

In light of the teaching of the Specification as a whole, including its specific examples, persons having ordinary skill in the art would have had no doubt whatsoever that Applicant invented a resin coated metal sheet in which an electrically conductive, magnetic coating film containing 20 to 40 mass% of a magnetic powder is coated to a thickness from 3 to 50  $\mu\text{m}$  at least on one surface of a metal sheet, wherein the magnetic powder is permalloy, and the magnetic coating film further contains from 20 to 40 mass% of an electrically conductive additive; wherein the total content of the electrically conductive additive and the magnetic powder contained in the magnetic coating film is 60% or less.

Additionally, the Examiner denies that Applicant's Specification describes a magnetic coating film having an electrically conductive additive in an amount of 20 to 40% when the magnetic coating film has a thickness of 3 to 50  $\mu\text{m}$ , as presently recited in claims 1, 7, 11, and 14 (OA, p. 3, 3<sup>rd</sup> full ¶). First, original Claim 1 reads: A resin coated metal sheet in which a magnetic coating film containing a magnetic powder is coated to a thickness from 3 to 50  $\mu\text{m}$  at least on one surface of a metal sheet. Original Claim 5 depends on original Claim 1 and reads: A resin coated metal sheet according to claim 1, wherein the magnetic coating film further contains from 20 to 40 mass% of an electrically conductive additive and the thickness of the magnetic coating film is from 3 to 15  $\mu\text{m}$ .

The Examiner doubtless recognizes that a dependent claim must further limit the independent claim upon which it depends. Thus, Claim 1 is necessarily open to from 20 to 40 mass% of an electrically conductive additive. Moreover, the Specification at page 64, first paragraph, teaches "a coating film may also contain a conductive filler typically represented

by Ni, by which excellent conductivity can be ensured . . . the lower limit for the film thickness is . . . preferably 3  $\mu\text{m}$  . . . .” The Specification also teaches at page 64, 2<sup>nd</sup> paragraph, “It is recommended to define the upper limit for the film thickness to 50  $\mu\text{m}$  . . . .”

Accordingly, persons skilled in the art reasonably would have understood that Applicant’s Specification describes a resin coated metal sheet in which an electrically conductive, magnetic coating film containing 20 to 40 mass% of a magnetic powder is coated to a thickness from 3 to 50  $\mu\text{m}$  at least on one surface of a metal sheet, wherein the magnetic powder is permalloy, and the magnetic coating film further contains from 20 to 40 mass% of an electrically conductive additive; wherein the total content of the electrically conductive additive and the magnetic powder contained in the magnetic coating film is 60% or less. At page 27, lines 21-22, the Specification expressly states, “[I]n the invention, the thickness of the magnetic coating film is defined as 3 to 50  $\mu\text{m}$ .”

The Examiner’s finding that the original Specification does not provide an adequate written description of the subject matter defined by previously presented Claims 1, 7, 11, and 14 is clearly erroneous and fairly should be withdrawn.

Rejections of Claims 1, 4, and 5 under 35 U.S.C. § 112, 2<sup>nd</sup> ¶

Claims 1, 4, and 5 stand finally rejected under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph, as indefinite (OA, p. 4). The Examiner concludes that the phrase “the total content” in Claims 1 and 5 lacks antecedent basis in the claims (OA, p. 4, ¶¶ 6-9). The rejection is erroneous as a matter of law.

Claims need only reasonably apprise those skilled in the art of their scope and be as precise as the subject matter permits. *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1385 (Fed. Cir. 1986). Applicant’s claims include the clause “wherein the total content of the electrically conductive additive and the magnetic powder contained in the magnetic coating film is 60% or less” (Claims 1 and 5). The Examiner will note that the

criticized clause positively states that the total content of the electrically conductive additive and the magnetic powder contained in the magnetic coating film is 60% or less. Thus, the total content of 60% or less in the magnetic coating film reasonably would have been understood to include the content of from 20 to 40 mass% of the magnetic powder and the content of from 20 to 40 mass% of the electrically conductive additive in the magnetic coating film. Where is there confusion?

During examination, the PTO must give the claims in an application their broadest reasonable interpretation consistent with the specification. *In re Suitco Surface, Inc.*, Slip Opinion, Appeal No. 2009-1418, page 6 (Fed. Cir. 2010); *In re Am. Acad. Of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004); *In re Sneed*, 710 F.2d 1544, 1548 (Fed. Cir. 1983). Claim interpretation is a matter of law. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005)(en banc). Read consistent with Applicant's Specification at page 30, first two paragraphs, there would have been no misunderstanding that "the total content of the electrically conductive additive and the magnetic powder contained in the magnetic coating film is preferably 60% or less." The antecedent basis for the total content of the electrically conductive additive and the magnetic powder contained in the magnetic coating film of preferably 60% or less is apparent from the claim language itself when properly read in light of the teaching of the Specification. The total content of the electrically conductive additive and the magnetic powder contained in the magnetic coating film of preferably 60% or less clearly means the total of the specified content of the electrically conductive additive and the specified content of the magnetic powder contained in the magnetic coating film is 60% or less. Those skilled in the art would have been reasonably apprised of that meaning by the claim language itself when read in light of the supporting Specification. No other antecedent basis is required by law. The "the" in "the total content" as claimed does not require an

antecedent, especially when the contents of the total content are defined. The rejections should be withdrawn.

Rejections of Claims 1, 4, 7, 8 & 11-15 under 35 U.S.C. § 103 over Watase, Hosoe, & Nakao

Previously presented Claims 1, 4, 7, and 8 were rejected under 35 U.S.C. § 103 over Watase (KR 2003-0010506, published February 5, 2003) in view of Hosoe (US 2003/0094076 A1, published May 22, 2003)(OA, pp. 5-8). Previously presented Claims 11-15 were rejected under 35 U.S.C. § 103 over Watase in view of Hosoe and Nakao (U.S. Patent 5,945,218, issued August 31, 1999)(OA, pp. 8-15). For the reasons stated below, the Examiner's final rejections should be withdrawn.

The Examiner finds that Watase discloses a metal sheet coated with a heat dissipating coating film containing a heat conductive filler and having a thickness of 10  $\mu\text{m}$  (OA, p. 5). The Examiner finds that the heat dissipating or heat conductive coating film may additionally contain an electrically conductive filler (OA, p. 5). Thus, the heat dissipating coating film may comprises a polyester resin, a heat conductive filler, and 10-50% of an electrically conductive filler such as Ni (OA, p. 5). Applicant does not now contest those findings.

However, the Examiner acknowledges (OA, p. 5, last sentence), "Watase is silent to a further magnetic powder, which said magnetic powder is a permalloy." To remedy Watase's deficiencies, the Examiner relies upon Hosoe's disclosure.

Hosoe describes alloy coatings which comprise a binder and fine magnetic permalloy particles having an extremely small particle size dispersed therein for use in coating molded objects in order to shield molded objects from electromagnetic radiation [0002; 0004-0005; 0007-0009; 0029; 0045]. Hosoe teaches that the binder may be a polyester resin [0046] and the fine magnetic permalloy particles may be dispersed in the binder in amounts from 5-95 wt.% [0053] to produce a coating [0045]. The coatings may be applied to a substrate to a coating thickness of a few dozen micrometers to approximately 100  $\mu\text{m}$  [0054]. The lower

limit of the amount of fine magnetic permalloy particles having an extremely small particle size in the applied coating appears to be 30 wt.% [0054].

The Examiner concludes that it would have been prima facie obvious to a person having ordinary skill in the art to add Hosoe's fine magnetic permalloy particles having an extremely small particle size to Watase's heat dissipating coating without any teaching whatsoever to do so. Alternatively, the Examiner concludes that it would have been prima facie obvious to a person having ordinary skill in the art to add Watase's heat dissipating filler and electrically conductive filler in an amount ranging from 10-50% to Hosoe's electromagnetic shielding coating also without any teaching whatsoever to do so. In either case, the Examiner concludes that persons having ordinary skill in the art would have been motivated to apply such a coating to a metal sheet to simultaneously provide heat dissipation properties, electrically conductive properties, and electromagnetic shielding properties. The Examiner's conclusion is inconsistent with Hosoe's disclosure and design.

First, Hosoe instructs that it is important when dispersing fine electromagnetic shielding materials in a resin to use a metal powder having a very small particle size so that "the gaps between particles can be narrowed (the metal powder can be filled more densely) and, as a result, increase the shield effect" [0008]. Therefore, any combination or dispersion procedure which increases the gaps between the particles and/or reduces their density in the coating decreases the shielding effect and is not at all desirable. The increased density of the fine electromagnetic shielding materials in a resin is most important when the thickness of the film is 100  $\mu\text{m}$  or less [0009; 0054].

To achieve its desired result, Hosoe invented a new process for producing fine alloy powders utilizing a trivalent titanium compound and a complexing agent to facilitate simultaneous deposition of the two metals which form the fine permalloy particles having a particle size of 1-100 nm (Hosoe, Claims 1-4). Hosoe expressly states [0014], "[T]he alloy



powder thus formed can be made 1 to 100 nm, in other words, extremely small in particle size, high in purity, and uniform in composition.” Moreover, Hosoe teaches that any and all prior art procedures and additives which decrease the uniformity of the alloy composition in the alloy powder and reduce the uniformity of its dispersion in a coating composition is most undesirable [0069]. Thus, Hosoe would have taught persons having ordinary skill in the art that further additives which may promote aggregation of the permalloy fines and necessarily decrease the uniformity and density of the dispersion in the electromagnetic shielding coating film are undesirable. Moreover, Hosoe would have taught persons having ordinary skill in the art that the addition of fine permalloy particles to heat dissipating coatings containing substantial amounts of heat dissipating fillers and 10-50% of electrically conductive fillers such that a uniform, high density dispersion of fine permalloy particles cannot be achieved would serve no useful electromagnetic shielding function whatsoever.

Persons having ordinary skill in the art reasonably would have expected that Hosoe’s fine permalloy particles could not be adequately dispersed to the density required to affect electromagnetic shielding in a heat dissipating composition taught by Watase which already contains substantial amounts of heat conductive filler and electrically conductive filler. Moreover, persons having ordinary skill in the art reasonably would have expected that Watase’s heat conductive filler and/or electrically conductive filler could not be added to Hosoe’s coatings comprising fine permalloy particles without detrimentally affecting the uniformity of dispersion and the density of the fine permalloy particles required to affect electromagnetic shielding.

To sustain a rejection for obviousness, the prior art must reasonably suggest the claimed composition and enable one skilled in the art to make and use the claimed composition with reasonable expectation of success. *In re O’Farrell*, 853 F.2d 894, 903 (Fed. Cir. 1988); *In re Hoeksema*, 399 F.2d 269, 274 (CCPA 1968). Moreover, the prior art

must lead the person having ordinary skill in the art to reasonably expect that the claimed subject matter could be successfully made and used without undue experimentation. *In re O'Farrell*, 853 F.2d 894, 903 (Fed. Cir. 1988); *In re Dow Chemical Co.*, 837 F.2d 469, 473 (Fed. Cir. 1988); *Merck & Co., v. Biochraft Laboratories, Inc.*, 874 F. 2d 804, 809 (Fed. Cir.1989). The combined prior art relied upon by the Examiner provides no more than an invitation to experiment without any reasonable expectation of success. A conclusion of obviousness requires some motivation, incentive, suggestion, or teaching to do what Applicant has done. *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 416-418 (2007). "Obvious to try" has long been held not to constitute obviousness under 35 U.S.C. § 103. *In re Deuel*, 51 F.3d 1552, 1559 (Fed. Cir. 1985).

The Examiner also finds that Watase suggests adding carbon black having an average particle diameter of 5-100 nm in amounts greater than 3% to coatings already containing substantial amounts of heat conductive filler and electroconductive filler (OA, p. 7). Now, the Examiner suggests that it would have been prima facie obvious further to add Hosoe's fine permalloy particles to Watase's coatings comprising substantial amounts of heat conductive filler, substantial amounts of electroconductive filler, and substantial amounts of carbon black without narrowing the gaps between Hosoe's fine permalloy particles, without decreasing the density of Hosoe's fine permalloy particles in the coating, and without detrimentally affecting the electromagnetic shielding effects Hosoe requires. Applicant respectfully suggests that persons having ordinary skill in the art reasonably would not have expected the success Applicant has achieved.

To sustain the conclusion of obviousness for Applicant's Claims 11-15, the Examiner relies on the additional teaching of Nakao (OA, pp. 8-15). The Examiner relies upon Nakao for its teaching to apply a coating containing a white pigment such as titanium dioxide to a multilayer substrate to improve surface gloss, smoothness, chipping resistance, etc. (OA, p.

10, last ¶). The Examiner in effect suggests that persons having ordinary skill in the art reasonably would apply a coating film comprising substantial amounts of heat conductive filler, substantial amounts of electrically conductive filler, substantial amounts of fine permalloy particles, and optionally substantial amounts of carbon black, to a metal sheet without detrimentally affecting the density and uniform distribution of the fine permalloy particles and the electromagnetic shielding effects thereof, and then further apply a coating of white pigment thereover for the benefits disclosed by Nakao which do not appear to be related to heat dissipation coatings, electrically conductive coatings, electromagnetic shielding coatings, and seem to be inconsistent with the addition of carbon black to the coatings. The Examiner not only suggests that the composite Applicant claims would have been obvious, but also unreasonably suggests that the person having ordinary skill in the art is more of a soothsayer than a common artisan.

The Examiner's rejections based on Watase and Hosoe, optionally further in view of Nakao, fairly should be withdrawn.

Rejections of Claims 5 & 22-24 under 35 U.S.C. § 103 over Watase, Nagano, and Nakao

Previously presented Claims 5 and 22 were rejected under 35 U.S.C. § 103 over Watase in view of Nagano (U.S. Patent 5,455,116, issued October 3, 1995)(OA, pp. 15-19). Previously presented Claims 23-24 were rejected under 35 U.S.C. § 103 over Watase in view of Nagano and Nakao (OA, pp. 19-25). For the reasons stated below, the Examiner's final rejections should be withdrawn.

Again, the Examiner finds that Watase discloses a metal sheet coated with a heat dissipating coating film containing a heat conductive filler and having a thickness of 10  $\mu\text{m}$  (OA, p. 15). The Examiner finds that Watase's heat dissipating or heat conductive coating film may also contain an electrically conductive filler (OA, p. 16). Thus, Watase's heat dissipating coating film may comprise a polyester resin, a heat dissipating filler, and from

10-50% of an electrically conductive filler such as Ni (OA, p. 16). Applicant does not now contest those findings.

However, the Examiner acknowledges (OA, p. 5, last sentence), “Watase is silent to a magnetic powder being a soft magnetic ferrite powder and a total content of the electrically conductive additive and magnetic powder is from 30-60 mass %.” To remedy Watase’s deficiencies, the Examiner relies upon Nagano’s disclosure. Applicant is somewhat confused by the Examiner’s references to a total content of the electrically conductive additive and magnetic powder from 30-60 mass %. Applicant’s Claim 5 requires an electrically conductive, magnetic coating film coated to a thickness of 3-15  $\mu\text{m}$  which contains 20-40 mass% of a soft magnetic ferrite powder, 20-40 mass% of an electrically conductive additive, and the total content of the electrically conductive additive and the magnetic powder in the magnetic coating film is 60% or less. Claims 5 and 22-24 all require 20-40 mass% of an electrically conductive additive.

According to the Examiner, Nagano teaches an electromagnetic wave reflection-preventing material comprising a resinous (polyester resin) layer containing a ferrite electromagnetic absorber and an electrically conductive metal or metal oxide powder (OA, p. 16). However, the Examiner acknowledges that the electrically conductive powder is present in the resin layer in a total amount less than 20 parts by weight (column 4, lines 29-31 and lines 38-43). In fact, Nagano expressly states (Nagano, col. 4, ll. 38-43; emphasis added):

When the mixture of ferrite with at least one of carbon, metal powder and electrically conductive metallic oxide, used, in the range of 3 to 200 parts by weight in total, a total amount of carbon, metal powder and electrically conductive metallic oxide being less than 20 parts by weight.

Nevertheless, the Examiner finds “that the amount of the electrically conductive metal powder as taught by Nagano share an endpoint with that presently claimed and that the only deficiency of Nagano . . . is that Nagano . . . disclose[s] the use of less than 20% mass metal powder, while the present claims require 20 to 40% mass conductive additive” (OA, p. 16).

To the contrary, the amount of the electrically conductive powder as taught by Nagano does NOT share an endpoint with the presently claimed electrically conductive, magnetic coating film. Nagano's less than 20 mass% electrically conductive additive does not overlap or even touch Applicant's claimed 20 to 40 mass% electrically conductive additive.

To sustain the alleged case for obviousness, however, the Examiner continues to rely on a finding that the amounts are "so close to each other" that a conclusion of obviousness is justified (OA, pp. 16-17, bridging ¶). Again, the Examiner cites *Titanium Metals Corporation of America v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), for the proposition that "close" is a sufficient basis for a conclusion of obviousness. Again, the Examiner is reminded that the Board of Patent Appeals and Interferences (Board) has previously rejected the proposition that "close enough" is sufficient support for a conclusion obviousness where, as here, the prior art expressly teaches away from, or teaches not to exceed, the specified range in order to obtain a resin layer having acceptable electromagnetic wave reflection-preventing properties. In *Ex parte SUSUMU TANAKA and Yasuo Murakami*, Appeal 2007-3845, decided March 28, 2008 (attached to Applicant's Amendment filed January 6, 2011), the Board reversed an examiner's conclusion of obviousness based on the "close enough" argument and the rationale in *Titanium Metals Corporation of America v. Banner*, *supra*. At pages 4-5 thereof, the Board stated (*Tanaka Decision*, pp. 4-5; emphasis added):

The Examiner recognizes that JP'740 teaches a steel alloy having 0.5%-.9% C. However, relying on MPEP §2144.05 and *Titanium Metal Corp. of America v. Banner*, 778 F.2d 775 (Fed. Cir. 1985), the Examiner then asserts that the 0.9% C is close enough to the claimed 0.95% carbon that there is prima facie obviousness. However, as discussed above, JP'740 teaches a carbon content which is entirely outside of the claimed range and specifically warns against exceeding the upper limitation of 0.9% C due to the materially different property expected by one of ordinary skill in the art. In other words, contrary to the Examiner's assertion, JP'740 teaches that the inclusion of greater than 0.9% carbon does not expect to produce a steel alloy having *the same properties* as a steel alloy having 0.5% to 0.9% carbon as required by *Titanium Metal Corp. of America*. As such, a person of ordinary skill in the art following the teachings of JP'740 would not have been motivated to utilize steel comprising carbon exceeding the upper limitation of 0.9% in the disclosed

method. Therefore, we agree with Appellants that prima facie obviousness has not been established on the present record . . . .

The Examiner's only answer to the Board's refusal to accept the close enough argument is that Applicant's Specification in this case does not disclose that 20-40 mass% of electrically conductive additive is "critical" (OA, p. 17, 1<sup>st</sup> full ¶). However, the range of 20-40 mass% for the electrically conductive additive is admittedly preferred throughout the Specification. See the Specification at pages 29-30; original Claim 5, and page 93, Examples 6-10 of Table 1. Applicant may claim its preferred ranges.

Moreover, whether or not Applicant's Specification teaches that 20-40 mass% of electrically conductive additive is critical to produce an electrically conductive, magnetic coating film is irrelevant to a conclusion of obviousness of the claimed subject matter under 35 U.S.C. § 103 based on prior art teachings. Applicant's claims require 20-40 mass% of the electrically conductive additive. As the Examiner acknowledges, Nagano requires less than 20 parts by weight per 100 parts by weight of binder (Nagano, col. 4, ll. 29-31 and 38-42).

The Examiner has the initial burden to establish a sound factual basis in the prior art for rejecting Applicant's claims under 35 U.S.C. § 103. See *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988); *In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). Claims are rejected under 35 U.S.C. § 103 over evidence in the prior art.

No teaching in Watase to add substantial amounts of carbon black or additional teaching in Nakao to provide an additional layer of white pigment over Watase's heat dissipating layer including heat dissipating filler, electrically conductive filler, and optionally carbon black, undermines Nagano's express requirement that the total amount of carbon, metal powder, and electrically conductive metal oxide in an electromagnetic wave reflection-preventing resin layer including soft magnetic ferrite powder should be less than 20 parts by weight per 100 parts by weight of binder (Nagano, col. 4, ll. 29-31 and 38-42). The Examiner has not satisfied the PTO's initial burden of proof to establish a factual basis for concluding

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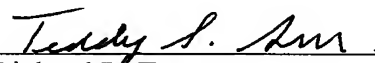
that the subject matter Applicant claims would have been obvious to persons having ordinary skill in the art at the time this Application was filed.

Accordingly, the Examiner's rejections of Claims 5 and 22-24 under 35 U.S.C. § 103 over Watase and Nagano, optionally further in view of Nakao, should be withdrawn.

For the reasons stated, Applicant's previously presented claims are patentable over the applied prior art and otherwise in condition for allowance. Thus, early Notice of Allowance is respectfully requested.

Respectfully submitted,

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